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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/669,772

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Thomas M. Barbara

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Varian Inc.

Legal Department

3120 Hansen Way D-102

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EXAMINER

VIJAYAKUMAR, KALLAMBELLA M

ART UNIT

PAPER NUMBER

1751

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/669,772	Applicant(s) BARBARA ET AL.	
	Examiner Kallambella Vijayakumar	Art Unit 1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 5,6 and 16-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- Claims 1-19 are currently pending with the application. Claims 1 and 7 were amended. Claims 5-6 and 16-19 withdrawn.
- Applicant's election with traverse of Group-I, Species- of Gd and Epoxy, Claims 1-4 and 7-15 in the reply filed on 08/10/2006 is acknowledged. The traversal is on the ground(s) that the species are not mutually exclusive because 'one claim recites limitations which under the disclosure are found in a first species but not in a second, while a second claim recites; limitations disclosed only for the second species and not the first." And "species claimed are considered clearly unpatentable over each other," wherein the claims and species do not meet this test (Response, Pg-5, Para-3-4). This is not found persuasive because applicant's fail to show how these two factors are met and for the reasons set forth in office action mailed 05/23/2006. The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The terms "selected value of magnetic susceptibility" in claim 1 and "selected value of magnetic susceptibility equal to that of another selected material" in claim 7 are relative terms which renders the claims indefinite. The terms "selected value of magnetic susceptibility" in claim 1 and "selected value of magnetic susceptibility equal to that of another selected material" in claim 7 are not defined by the claim/s, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The specification discloses attaining near zero susceptibility at 77K or below (Abstract), but does not teach or disclose what range of values of magnetic susceptibility/induced magnetization are covered by these limitations.

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Claim Rejections - 35 USC § 102

Claim Rejections - 35 USC § 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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1. Claims 1-3 and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by, or as obvious over Cheng (US 5,023,072).

The use of phrase "used in magnetic resonance apparatus" in the claim-1 has not been treated with patentability. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Cheng teaches a composition comprising paramagnetic Gadolinium acetyl acetonate or Gd-DTPA attached to sucrose sulfate/sucralfate such as Gd-DTPA-HSA-Sucralfate (CI-4, Ln 12-48; CI-5, Ln 56-63; CI-6, Ln 26-63; CI-8, Ex-1) (Amorphous matrix; See US 5,358,936, CI 32, Ln 5-10). The prior art composition is either same or substantially same as that claimed by the applicants, and further made by identical process by mixing the components, where by the instant claimed properties including magnetic susceptibilities in claims 1-2 and 7-9 will be inherent in the prior art composition, because they possess same properties. Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). All the limitations of the instant claims are met.

The reference is anticipatory.

In the alternative that the disclosure by Cheng be insufficient to arrive at the limitations of the instant claims, it would be obvious to a person of ordinary skilled in the art to optimize the properties of the Gd complex as choice of its use in magnetic resonance imaging characteristics with reasonable expectation of success.

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2. Claims 1-2, 4, 7-12 and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Halverson et al (US 3,377,292).

Halverson discloses a photoluminescent composition containing a lanthanide chelate such as Gd-ethyl stearoylacetate incorporated in a solid plastic (CI-1, Ln 22-23; CI-3, Ln 24-30, 46-75). With regard to method claim 11, the prior art teaches making the composition by mixing the components that are either same or substantially same as that claimed by the applicants (CI-15, Ex-29). The prior art composition is either same or substantially same as that claimed by the applicants, and further made by identical process, where by dispersion of Gd^{3+} in the polymer matrix and the instant claimed properties including selected value of magnetic susceptibility in claims 1-2, 7-9, 11-12 and 15 will be inherent in the prior art composition, because they possess same properties. With regard to claims 4 and 14, the prior art teaches a composition containing an epoxy resin and making it (C-15, Ex-29, Ln 45). All the limitations of the instant claims are met.

The reference is anticipatory.

3. Claims 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halverson et al (US 3,377,292) in view of Zheng et al (J. Mater. Chem, 2001,11, 2615-2619).

The disclosure on the composition and method of making the composition by Halverson et al as set forth in rejection-2 under 35 USC 102(b) is herein incorporated.

The prior art teaches various diketonates of lanthanides in the composition, but is silent about the specific diketonates in the composition.

In the analogous art, Zheng et al teach electroluminescence properties of Tb and Gd diketonates including $Gd(acac)_3$ (Title, Abstract, Page 2617, C-1, para-2, Fig-4) (Also, See Abstracts from Yinping et al and Deqing et al, J. RareEarths, 2004.2: for photoluminescence of Gd Chelates).

It would have been obvious to a person of ordinary skill in the art to substitute the Gd chelate in the composition of Halverson et al with the $Gd(acac)_3$ of Zheng et al as functional equivalents with reasonable expectation of success, because combined prior art is suggestive of the claimed composition and method.

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4. Claims 1-3, 7-13 and 15 are rejected under 35 U.S.C. 102(e/a) as being anticipated by Hofacker et al (US 2003/0125576).

Hofacker et al teach an aliphatic oligocarbonate polyol prepared by the transesterification of organic oligocarbonate with aliphatic polyol in presence of a catalyst comprising Gd-tris(2,2,6,6-tetramethyl-3,5,heptane dionate) <Gd (TMHD)> (Abstract; Pg-2, Para 0017). The catalyst was used either as a solid or in solution in an amount of 0.01-10,000 PPM (Para 0018-19) that inherently mixes homogeneously and incorporated in the resultant composition. With regard to method claims, the prior art teaches making the composition by mixing the components that are either same or substantially same as that claimed by the applicants (Para 0020, 0029). The prior art composition is either same or substantially same as that claimed by the applicants, and further made by identical process, where by dispersion of Gd^{3+} in the polymer matrix and the instant claimed properties including magnetic susceptibilities in claims 1-2, 7-9, 11-12 and 15 will be inherent in the prior art composition, because they possess same properties. All the limitations of the instant claims are met.

The reference is anticipatory.

5. Claims 1, 4, 7-11 and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Mallener et al (US 4,756,869).

Mallener et al teach a coating containing epoxy resin lacquer and gadolinium oxide (C-5, Ex-2). Gadolinium oxide meets the limitation of a metal ion containing Gd (III) and a ligand over the applicant's disclosure of its addition in borosilicate glass (Spec: US 2005/0062022; Para 0053). The prior art composition is either same or substantially same as that claimed by the applicants, where by dispersion of Gd^{3+} in the amorphous matrix and the instant claimed properties including magnetic susceptibilities in claims 1, 7-9, 11 and 14 will be inherent in the prior art composition. All the limitations of the instant claims are met.

The reference is anticipatory.

Response to Arguments

Applicant's arguments filed 08/10/2006 have been fully considered but they are not persuasive. Applicant's argument that the limitation of "selected" value has been ignored is not persuasive, because the prior art compositions have the same components and are identical to that claimed by the applicants, and the Applicant's selected value of magnetic susceptibility at cryogenic temperatures" will inherently be present in the prior art compositions (Res, Pg-6, Ln 10-12), because "Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

With regard to the argument that the prior art by Halverson (US 3,377,292), Hofacker (US 2003/0125576) does not teach the magnetic properties of their compositions, and Mallener (US 4,756,869) fail to teach any value of magnetic susceptibility (ResPg-6, Ln 25-29; Pg-7, Ln 11-20), the prior art compositions have the same components and identical to that claimed by the applicants, Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. In re Best, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). The prior art compositions and their method of making the compositions are either same or substantially same and "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

With regard to the argument that the combination of Halverson and Zheng could have been appropriate, only if the latter brought in magnetic properties (Res, Pg-7, Ln 21-25), the reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant. >See, e.g., In re Kahn, 441 F.3d 977, 987, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006).

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For the reasons set forth above, applicant's fail to patentably distinguish their composition and process of making the composition over the prior art.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

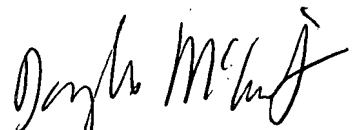
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kallambella Vijayakumar whose telephone number is 571-272-1324. The examiner can normally be reached on 8.30-6.00 Mon-Thu, 8.30-5.00 Alt Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on 571-272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KMV
April 19, 2007.


DOUGLAS MCGINTY
SUPERVISORY PATENT EXAMINER

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